

Agenda for meeting with BHMC, PHD, IDEQ and EPA

Location: Bunker Hill Mine

Purpose: 1) To review the terms of the SAOC and discuss those in more detail, esp. the flow control requirements. 2) To review in detail the O&M requirements for Reed Landing and to perform a site visit with PHD and IDEQ folks. 3) To share additional information EPA has about the mine water flows and the W. Fork Milo Creek Diversion Design.

Objectives: To answer any questions any attendee has, share information openly and to identify any information or communication needs.

Attendees Scheduled: Mark Hartmann, Brian Harden, Ed Moreen, Dan McCracken, Andy Helkey, Kerry James and Mark Schram

1:00 Introductions and Agenda Review

1:10 Overview of the SAOC including the CTP

- In-Mine Diversion System Purpose activation (70 days of Eff. Dte. or emergency) and O&M (P 29)
- Contingency System activation, O&M, location, procedures preventive cleaning etc. (P30)
- Reed Landing – will visit at 2:00 (P31)
- Manage Mine wastes to prevent migration off-site (P32)
- Discharge Permit and treatment plant within 5 years of Eff. Dte. (P 33)
- Reed & Russel Adits – Visit @ 2:00, treat prior discharge or reroute back into mine. (P 34)
- Access Port in Mine Yard
- Changes in flow volume and/or chemistry notification

2:00 drive to Reed Landing, review O&M and observe Reed and Russel Adit flows

3:00 adjourn

Notes from meeting

Attendees:

BHMC: Mark Hartmann, COO, General Manager; Brian Harden, Purchasing Manager, Surface Plant; Kerry James, Maintenance Superintendent; Mark Schram, Mine Manager and one other crew member.

EPA: Ed Moreen, Remedial Project Manager

IDEQ: Dan McCracken, Kellogg Project Office Manager

Panhandle Health District: Andy Helkey, Kellogg Office Manager

Meeting Highlights:

EPA, IDEQ, PHD and BHMC met on June 6 to discuss the Settlement Agreement on Consent terms applicable to operations of the mine, Reed Landing O&M and the logistics related to treatment of AMD from the Bunker Hill Mine at the CTP. The following bullets are intended to capture the salient discussion points:

- Self-introductions, constructive discussion regarding the perspective that this is a partnership in that water from the mine is treated at the CTP and cooperation is the key to making the treatment of that water effective and compliant with discharge requirements.
- AMD Flows will need to be controlled from the mine and cannot exceed 2000-2500 gpm depending upon the Groundwater Control System (GCS) flows after completion. Ed noted that EPA will work with the BHMC with the goal to accommodate higher flows during draw down periods to establish additional storage capacity and/or reduce the mine pool elevation to the current operating level of 30' below 11 Level within the design flows for the CTP. The full treatment capacity at the CTP is designed for 5000 gpm after upgrades are completed (2020) and the anticipated groundwater system flows are expected to be 2000 - 2500. The contingency hydraulic design flow for the CTP is 8000 gpm but flows above 5000 will not be filtered and therefore not likely to meet discharge standards. Therefore, combined flows from the Bunker Hill Mine and the GCS for treatment at the CTP need to be maintained at less than 5000 gpm. Coordination and communication between BHMC and EPA are critical to ensure these flows are successfully treated.
- Discussed the agenda items listed on the agenda. M. Schram suggested cross over ditches as a more effective solution for the Contingency System and indicated they could be installed without a significant effort during mine tunnel maintenance. Mark H. confirmed that the sand bags are currently staged at KT entrance to address this measure until a better system is in place.
- Mark H. stated that he and several other BHMC representatives viewed the last pigging activity and they know the location and understand the need to preserve access to the "upper Pigging/Camera Access Vault and Gate Valve" in the Mine Yard as per paragraph 44.a.
- Mark H and Mark S acknowledged the need to communicate any shifts in flow volume and/or chemistry and that the CTP is not designed to treat blasting and/or mining chemicals that may be used in active mining tasks.
- Paragraph 46 regarding compliance with institutional controls was also discussed. Permits can be obtained from the Panhandle Health District office in Kellogg for disturbance and/or capping of mine waste contaminated materials.
- When discussing the management of mine wastes on site, Mark H indicated that BHMC plans to recontour and reclaim the mine waste on the north facing slopes of the property.
- Dan McCracken lead the meeting attendees through a visit of the Reed Landing Conveyance System and walk of the upper portion of the conveyance system from the Reed Landing to the upper grizzly structure. The system is showing signs of needing maintenance. The intake structure for the buried pipeline is full of bed load and there was debris indicating that the runoff had flowed down the concrete channel. This was likely a result of the pipeline intake being partially obstructed by the bedload and debris. Maintenance of the terraces and mesh netting (chain link) on the west side of the channel is necessary to keep material from sliding into and creating blockages. The terraces appear to need maintenance as there was considerable

materials visible on them. Mark H noted concerns about compliance with safety regulations in getting equipment on the terraces.

- The Reed and the Russel adit flows were observed, too. Mark H. indicated that Kerry and a crew member were going to do some reconnaissance after the meeting in both the Reed and Russell adits to determine how best to send the flows back into the mine and prevent their continued release as per paragraph 34.

A tour of the CTP was conducted on June 15 with Brian Harden, Kerry James, Mark Schramm, and ??? Ed Moreen with EPA and Spencer Archer with Wood conducted the tour after a safety briefing was conducted. An overview of the operations of the CTP was provided along with a description of the GCS. A walk through of the plant was conducted starting at the control building, then the lime silos, rapid mixing tank, aeration basin, floc basin, clarifier and discharge location.

Brian had requested that I retransmit the contact info. for Gary Fulton because his email could not read the contact cards previously transmitted. Ed transmitted the emergency contact info. for both Spencer Archer and Gary Fulton to Brian and Mark Hartmann on June 11. I am providing the contact table below so we all have it, please fill out the information for the critical pocs for BHMC.

Emergency Contact Info.

Name	Responsibility/Org	Cell #	Email
Ed Moreen	CTP Mngt – EPA	208-664-4588	Moreen.ed@epa.gov
Gary Fulton	CTP Ops Ferguson Co.	(b) (6)	garyfulton@ferconinc.com
Spencer Archer	CTP Construct/Ops Mngt – Wood PLC	805-550-4050	Spencer.archer@woodplc.com
Dan McCracken	IDEQ, Project Ofc Mngr		
Andy Helkey	PHD, Kellogg Ofce Mngr		
Mark Hartmann	BHMC, GM		mhartmann@bunkerhillmining.com
Brian Harden	BHMC, Surface Plant		bharden@bunkerhillmining.com
Mark Schram	BHMC, Mine Manager		
Kerry James	BHMC, Maintenance Super		kjames@bunkerhillmining.com